

PRACTICE OF PROPAGATING, PRUNING AND TRAINING GRAPE

Vines are Ordinarily Germinated from Cuttings, by Layering or by Grafting—Selection and Proper Keeping of Scions are Very Important—Treatment Given Determines Profit.

(By GEORGE C. HUSMANN, Pomologist, United States Department of Agriculture.)

In ordinary practice grapevines are propagated from seed, from cuttings, by layering, or by grafting. For originating new varieties, seedlings must of course be used. The individual seedlings differ so widely that they are seldom used by the intelligent planter even for grafting stock.

Cuttings for propagation may be prepared at any time after the vines have become dormant. Other things being equal, and if they are afterwards well cared for, the sooner they are prepared after the vines have become dormant the better. The length of the cuttings may vary from 8 to 20 inches, depending on the climatic and other conditions of the locality in which they are to be planted. Usually the hotter and drier the climate the longer the cuttings will need to be. They should always be made from young, well-matured wood, and preferably from medium-sized, short-jointed wood.

The treatment given vines during the first years of their growth largely determines the profit and pleasure to be derived from them. If improperly cared for during this period satisfactory returns are not obtained afterwards.

If cuttings are planted and the supply is sufficient, two in each place increases the chances of getting a full stand. Should both cuttings grow, one of them can easily be pulled up without injuring the other. To protect the cuttings from drying out,

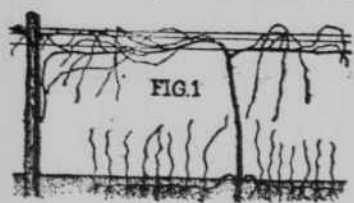


Fig. 1—A Vine With Two Canes Layered, showing the Method of Propagation by Layers.

Plant them so that the top bud projects only a trifle above the ground. If rooted vines, either plain or grafted, are used, the roots should be cut back to 3 or 4 inches, depending on their vigor. Only one cane of the op should be left, and this should be cut back to two or three good buds. If grafts are used, all scion roots and all suckers should be carefully removed.

During the first year after planting no pruning or training is usually given, although it is, perhaps, a good plan with vigorous plants, especially if the season is propitious, to rub off all except the straightest and strongest of the young shoots that start.

There are various ways in which the objects of pruning are accomplished. For instance, the growth and health of a plant are promoted and the size of the fruit is increased (1) by removing all the diseased parts and suckers; (2) by shortening extended shoots, side shoots and laterals; (3) by putting upright the part whose rapid growth is desired; and (4) by removing the fruit buds or fruit. The plant is retarded in growth and made to bear earlier and richer fruit by shortening the leading shoots and leaving the fruit-bearing wood and by bending down the

branches and ring-pruning them. The healing of wounded and diseased plants is promoted by removing the injured parts and dressing the wound. The head of a plant is renewed by cutting off the branches above; the

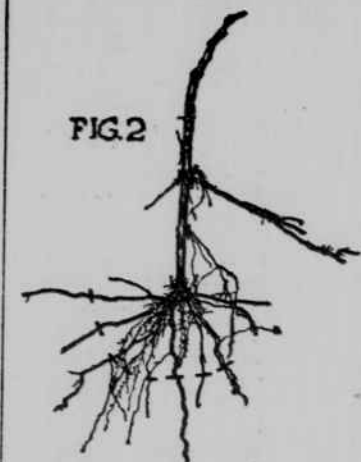


Fig. 2—A Grapevine Showing the Method of Pruning Roots Ready for Planting.

head is made to grow thicker by cutting back the outer branches and to grow thinner by amputating all canes on which there is too much growth.

There are so many species of grapes, each having peculiarities of its own and therefore responding most readily to certain cultural methods to which it is best adapted, that the pruning, training and growing of vines, which otherwise may appear quite simple, become complicated operations in which comparatively few people become expert, and vineyards in which serious mistakes are not made are rare.

In the overhead system, which has been used to some extent in New York, the vines are carried upon a canopy or overhead arbor six feet above the ground, consisting of three horizontal wires stretched at the same height. The center wire is fastened to posts which are placed at regular intervals, and the side wires are attached to three-foot cross arms of wood fastened to the posts. The head of the vine is annually cut back

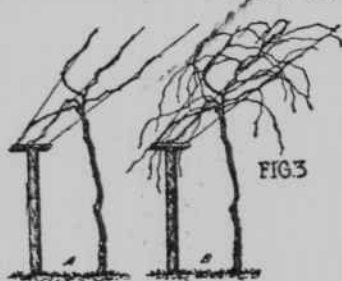
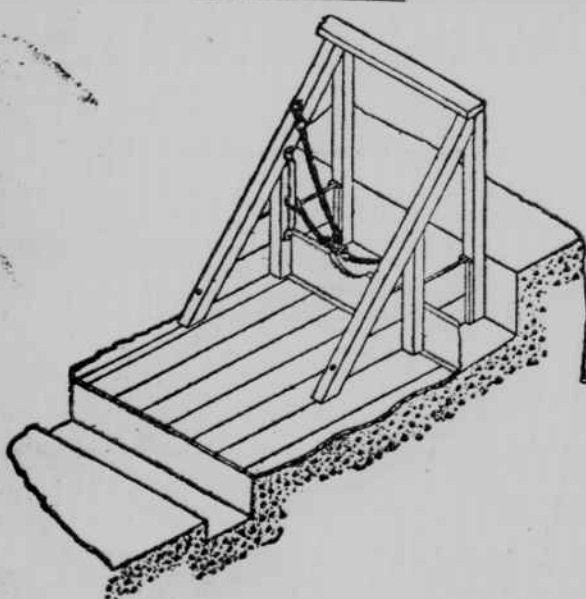


Fig. 3—A Pruned Vine (A) and an Unpruned Vine (B), Showing the Method of Training by the Overhead Caywood System.

to five canes and five spurs. The canes are fastened on the wires, two in one direction and three in the other, this division being alternated each year. Fig. 3, A and B, shows vines pruned and unpruned, trained according to this system.

CLEANLINESS OF FIRST IMPORTANCE



No man can succeed in dairying and make it realize to its full capacity who does not inform himself and become a student in the business and at his best thought into his every practice.

If there is anything—next to good hay—that is needed on a dairy farm, is clean, well kept, sanitary stables. We are to keep cows in a well equipped stable.

Success or failure in the dairy business does not depend upon the size of the farm or the number of cows a keeps, or the rushing he does,

but upon the character of the man, the intelligent thought he gives his business and his management. Men who take time to think, read and study are the ones that are making the money and are well satisfied with their vocation.

It is not breeding alone that is going to determine the future usefulness of the cow, but it must be supported by liberal feeding, daily care and careful observation.

The illustration shows an ideal stall in which the maximum amount of freedom is given by means of the chain tie.

They Put an End to It

Charles Sabie, 30 Cook St., Rochester, N. Y., says he recommends Foley Kidney Pills at every opportunity because they gave him prompt relief from a bad case of kidney trouble that had long bothered him. Such a recommendation, coming from Mr. Sabie, is direct and convincing evidence of the great curative qualities of Foley Kidney Pills. B. H. Gorrell.

THRICE SERVANTS.

Men in great place are thrice servants. They are servants of the sovereign or state, servants of fame and servants of business, so as they have no freedom, neither in their persons, nor in their actions, nor in their times. It is a strange desire to seek power over others and to lose power over a man's own self.—Bacon.

A Card

This is to certify that Foley's Honey and Tar Compound does not contain any opiates, any habit forming drugs, or any ingredients that could possibly harm its users. On the contrary, its great healing and soothing qualities make it a remedy for coughs, colds and irritations of the throat, chest and lungs. The genuine is in a yellow package. Ask for Foley's Honey and Tar Compound and accept no substitute. B. H. Gorrell.

Riches.

I cannot call riches better than the baggage of virtue. The Roman word is better, "impedimenta," for as the baggage is to the army so is riches to virtue. It cannot be spared or left behind, but it hindeth the march. Yea, and the care of it sometimes loseth or disturbeth the victory. Of great riches there is no great use except it be in the distribution. The rest is but conceit. So saith Solomon: "Where much is there are many to consume it. And what hath the owner but the sight of it with his eyes?"—Bacon.

Help to Keep Down Expenses

Mrs. J. E. Henry, Akron, Mich., tells how she did so: "I was bothered with my kidneys and had to go nearly double. I tried a sample of Foley Kidney Pills and they did me so much good that I bought a bottle, and feel that they saved me a big doctor's bill. B. H. Gorrell.

Canaries.

Sometimes a canary's coat gets pale, sickly yellow. Give him half an ounce of ground red pepper, such as is used on your table, and let the bird eat it as he likes. In a week he'll turn a beautiful orange color. Bird lice are troublesome at times. A pinch of powdered saffron put under the wings will drive away the pests. Gravel in the cage every day and a dish of tepid water for a bath every other day are indispensable to the singer's health and happiness.

Mrs. M. A. McLaughlin, 512 Jay St., LaCrosse, Wis., writes that she suffered all kinds of pains in her back and hips on account of kidney trouble and rheumatism. "I got some of Foley Kidney Pills and after taking them for a few days there was a wonderful change in my case, for the pain entirely left my back and hips and I am thankful there is such a medicine as a Foley Kidney Pills." B. H. Gorrell.

Cautious.

An old north country farmer visiting London put up at one of the big hotels. He had barely turned in on the first night when the "buttons" rushed into the room and switched on the electric light, exclaiming:

"Make haste, sir! Get up! The hotel is on fire!"

The old man slowly raised himself on one elbow and, fixing the boy with a determined look, remarked:

"Mind ye, if I do I wanna pay for the bed."—London Answers.

Mrs. Lela Love, wife of Wiley Love, a farmer living near Covena, Ga., says: "I have taken Foley Kidney Pills and find them to be all you claim for them. They gave me almost instant relief when my kidneys were sluggish and inactive. I can cheerfully recommend them to all sufferers from kidney troubles." B. H. Gorrell.

Often Becoming.

Marks—Your hair will be gray if it keeps on. Parks—Well, if it keeps on I shan't mind.—Boston Transcript.

"General debilitated for years. Had sick headaches, lacked ambition, was worn-out and all run-down. Burdock Blood Bitters made me a well woman."—Mrs. Chas. Freitag, Moosup, Conn.

Cheap Living.

In the Blue Nile region in Egypt a native laborer can live very comfortably on 6 to 8 cents a day.

Billions? Feel heavy after dinner? Tongue coated? Bitter taste? Complexion sallow? Liver needs waking up. Doan's Regulate cure bilious attacks. 25 cents at any drug store.

Bacon.

When buying bacon choose that with a thin rind and with firm fat of a pinkish white.

Farmers, mechanics, railroaders, laborers rely on Dr. Thomas' Electric Oil. Takes the sting out of cuts, burns or bruises at once. Pain cannot stay where it is used.

Even More So.

"Corns frequently affect a person's gait." "Rye too."—Boston Transcript.

Don't think that piles can't be cured. Thousands of obstinate cases have been cured by Doan's Ointment. 50 cents at any drug store.

Fourteenth Century Life.

In the fourteenth century people lived in mud huts, with a rough door and no chimney. It was not till a century later that the erection of a chimney was considered more than an indulgence in luxury, a fire commonly being built against the mud plastered wall of the hut and the smoke escaping through the roof. All furniture was of wood. Most persons slept on straw pallets with a log of wood for a pillow. Even the nobility had no glass in the windows during this time. Cleanliness was not a characteristic of the people, and Thomas a Becket was considered more than necessarily nice because he had the floor of his house strewn with fresh straw each day.

Drives Off a Terror

The chief executioner of death in the winter and spring months is pneumonia. Its advance agents are colds and grip. In any attack by one of these maladies no time should be lost in taking the best medicine obtainable to drive it off. Countless thousands have found this to be Dr. King's New Discovery. "My husband believes it has kept him from having pneumonia three or four times," writes Mrs. George W. Place, Rawsonville, Vt., and for coughs, colds and croup we have never found its equal." Guaranteed for all bronchial affections. Price 50 cts. and \$1.00. Trial bottle free at B. H. Gorrell's.

Far West in East.

It is a curious but almost unnoticed fact that San Francisco is three degrees of longitude east of the geographical center of that portion of the United States located in North America. San Francisco is closer to the extreme eastern portion of the coast of Maine than it is to the extreme western portion of the United States. It is about 7,000 miles from New York to the nearest Asiatic port; it is only twelve miles from the western end of the United States to the continent of Asia, for the western line of the United States must be measured north and south at the extreme western portion of Alaska.—New York Press.

Could Shout for Joy

"I want to thank you from the bottom of my heart," wrote C. B. Rader of Lewisburg, W. Va., "for the wonderful double benefit I got from Electric Bitters, in curing me of both a severe case of stomach trouble and of rheumatism, from which I had been a helpless sufferer for ten years. It suited my case as though made just for me." For dyspepsia, indigestion, jaundice, and for the system of kidney poisons, that cause rheumatism, Electric Bitters have no equal. Try them. Every bottle is guaranteed to satisfy. Only 50 cents at B. H. Gorrell's.

Tips From the Top.

The common spinning top of our childhood days is something more than a mere toy, and its principles have been translated to many of the most useful things around us. For example, by means of twisted grooves the spinning powers of the top have been imparted to rifle bullets and to the projectiles of our big guns. The torpedo, too, is maintained on its course by a similar property.

There is a compass dependent upon the principles of a top, and the gyrostatic railway is but another step in the same direction.

The Australian boomerang and quail in flight possess some of the properties of the top.—Pearson's Weekly.

Famous Stage Beauties

look with horror on Skin Eruptions, Rashes, Sores or Pimples. They don't have them, nor will any one, who use Bucklen's Arnica Salve. It glorifies the face. Eczema or Salt Rheum vanishes before it. It cures sore lips, chapped hands, chilblains, heat burns, cuts, bruises. Unequaled for piles. Only 25 cents at B. H. Gorrell's.

TWO ROADS.

Every evil and wasteful habit we persist in draws upon our strength and resources without making any proper return. On the other hand, every task that is faithfully done, every responsibility manfully borne in the path of duty steadies us like well bestowed ballast.

Fells a Foul Plot

When a shameful plot exists between liver and bowels to cause distress by refusing to act, take Dr. King's New Life Pills and such abuse of your system. They gently compel right action of stomach, liver and bowels, and restore your health and all good feelings. 25c at B. H. Gorrell.

Pounds and Francs.

A New York banker has a son who is studying art in Europe. According to the New York Evening Sun, he recently received a cable dispatch from his London bank saying: "Your son has drawn a sight draft on you for 20,000. Shall we honor it?" The banker's reply was a classic: "If it's those little French things, all right; if it's pounds, send him home."

When Buying, Buy Only the Best

Costs no more but gives the best results. H. L. Blomquist, Esq., Wis., says his wife considers Foley's Honey and Tar Compound the best cough cure on the market. "She has tried various kinds but Foley's gives the best result of all." B. H. Gorrell.

BEST AND HEALTH TO MOTHER AND CHILD. Mrs. Winslow's SOOTHING SYRUP has been used for SIXTY YEARS by MILLIONS of MOTHERS for their CHILDREN WHILE TEething, with PERFECT SUCCESS. IT SOOTHES the CHILD, SOOTHES the GUMS, ALLAYS all PAIN, CURES WIND COLIC, and is the best remedy for DIARRHŒA. It is absolutely harmless. Be sure and ask for "Mrs. Winslow's Soothing Syrup," and take no other kind. Twenty-five cents a bottle.

DRY FARMING POINTS

Potatoes Are Good Crop for Rotating With Grain.

System of Rotation Will Produce Four Crops in Five Years—Land Must Be Handled at Right Time and Not Neglected.

The climate has not changed, nor will it change, but man has and will continue to do so. And why is he changing? Because there are so many devoting their lives to finding out facts and giving them to the human race in a concrete form.

Men like King, Campbell and Hilgard and others, too numerous to mention, have practically devoted their lives to the building of a new agriculture. But for such men as these, we would not be tilling the deserts of the west and making paying crops in years like the present one. Campbell, the great apostle of dry farming, is the first man that ever gave us a complete set of rules for dry farming, and the writer wishes to state that anyone who will take his book on dry farming and apply the rules laid down by him, will succeed, writes Norman E. Holden, in the Scientific Farmer. Of course, there are always local conditions that will modify them.

One of Professor Campbell's rules is to always summer till and have two seasons' moisture for one crop. The writer has found that system of rotating will produce four crops in five years, but in rotating one must be equipped to handle the land at the right time and not neglect it. If one intends rotating, if it is a grain crop, the disk should follow immediately behind the harrower. This should be done with summer tillage, but it is not absolutely necessary as when a crop is to be planted the following year. After the disking, the land should be plowed, packed and harrowed. The following spring it should be double disked and harrowed sufficiently to make a good seed bed.

Potatoes are a good crop to plant for rotating with grain. One should plant an intertilled crop after grain. Canadian field peas are a good crop if they are planted in rows and cultivated. Corn is another and, where it can be grown, is probably the best. Here is a good rotation for one starting on sod: First year, plant small grain (preferably winter wheat or rye); second year, the same, then summer till the ground; next crop, potatoes, then Durum wheat. Of course this rotation proposition must be carefully looked into and if there is not sufficient moisture in the ground to warrant a crop, it is better to summer till. The moisture in the ground can be ascertained by taking samples as far down as the moisture goes and weighing the same. Place the damp soil in an oven after it has been weighed, dry it, and weigh again. This will give the amount of moisture. It is not advisable to crop unless there is at least four inches of water stored. Another, and one of the most important of all conditions to be understood, is that the more ideal conditions of the soil for plant life, the less moisture it will take to grow the crop.

That the year 1910 has demonstrated that dry farming is not a myth, is evidenced by the results obtained. The history of dry farming in Beaverhead county has been a course in which something of real merit had all those forces to contend with that have their origin in self-interest, lack of knowledge, etc. However, this season has proven to the most skeptical that dry farming is something real, a line of agriculture that is as safe to embark into as the irrigation system. This is a rather bold assertion. Do the facts sustain it?

For Tidier Streets.

Every one desires that the city shall be clean and tidy, but some people are careless where they could be a help in maintaining an orderly condition. Waste paper scattered about is one of the worst features of street untidiness, and it is conspicuous in practically all parts of most cities.

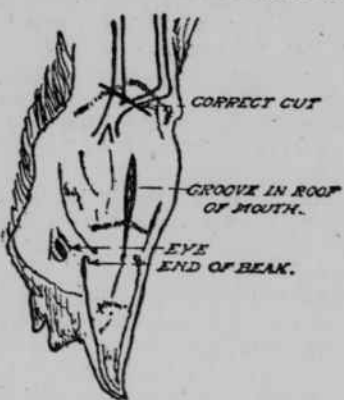
POULTRY



MANNER OF STICKING FOWLS

Common Pocket-Knife, With Medium-Sized Blade, Makes Excellent Instrument for Operation.

When the market calls for a bird to be bled, the best plan is to stick it in the mouth; and by so doing avoid the unsightliness so common where they are bled about the throat. Using this method, one should first of all have a stout cord



Where to Stick a Bird.

fastened to the ceiling, with a two-pound weight attached to the lower end. This should be just high enough to hang the bird to be picked at a convenient height. The weight is used to save tying a knot each time; as all that is necessary is to wind the string around the bird's legs, and the weight will hold it securely. Use a box or barrel to catch the feathers; and a small paint-can, with a hook fastened to the handle, is hooked into the bird's mouth to catch the blood and prevent its soiling the feathers. It requires very little practice to kill the birds in this manner. After the bird is hanged by the legs, cross the wings at the back and grasp the head in the left hand, the back of the head in the palm; and, with the end of the second finger, hold the mouth open; then, with the knife in the right hand, make a diagonal cut across the roof of the mouth, just where the arteries enter the head. Then, with the point of the blade, pierce the brain in about the middle of the roof of the mouth, which will loosen the feathers. The moment the operation is finished, the bird should be plucked, as the cooling of the body makes the feathers harder to pick. A common pocket-knife, with a medium-sized blade, makes a good instrument for sticking.

The Distome and the Pearl.

In the opinion of many experts pearls are the product of decay. The free pearls found in the common pearl-bearing mollusk are little tombs surrounding the bodies of the marine worms known as distomes.

In the month of August certain mollusks are found that have numerous small reddish-yellow points in the spot where pearls usually form. Then begins the imprisonment of the creature. In the first stages the surface of the distome is sprinkled with tiny grains of carbonate of lime. These granulations grow and take the form of crystals which end by forming a calcareous deposit around the creature's body.

Mode of Concealment.

"I want to keep the real facts concerning this transaction a secret," said the enterprising man. "Then," replied the sage counselor, "I should immediately start a controversy concerning it. Then so many theories will be advanced that the facts will never become public."

Grow 75 or 100 Bushels of Corn per Acre

Your acres that are not producing what they should can be made to yield a great deal more. Careful seed selection, thorough cultivation and the best fertilizers will build up your farm, compel bigger yields, bring you bigger profits.

Virginia-Carolina High-Grade Fertilizers

are carefully mixed for the purpose of making your crops produce the big yields you should get. They have produced more big corn yields than any other fertilizers. They are made of the very best raw materials that skill can devise and money can buy. They are accurately proportioned and carefully mixed into the best balanced, most drillable fertilizers any farmer can use.

How to secure bigger corn yields is well told in our 1912 YEAR BOOK. Copy will be sent you free for your asking.

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